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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/587,072

07/21/2006

Hisao Tatsumi

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EXAMINER

CORMIER, DAVID G

ART UNIT

PAPER NUMBER

1792

MAIL DATE

DELIVERY MODE

03/23/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/587,072	TATSUMI ET AL.	
	Examiner	Art Unit	
	DAVID CORMIER	1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12222006, 07272007, 09232008</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Information Disclosure Statement

1. The duplicate references in the IDS have been crossed out and are not initialed.

Claim Objections

2. Claim 1 is objected to because of the following informalities: there is no colon following the word "comprising." Appropriate correction is required.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claim 1 recites the limitation "vibration system" in line 11. There is insufficient antecedent basis for this limitation in the claim. Because it is unclear what this limitation

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refers to, it will be interpreted to include the water tub, rotating tub, electric motor, etc. (as disclosed in the specification in paragraph 28).

7. Regarding Claim 4, the phrase "baffle includes a first baffle...and a second baffle" is unclear. It is unclear how the baffle, which was previously recited in Claim 1, can be both a first baffle and a second baffle.

8. Claim 5 recites the limitation "the one end plate side" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1, 2, and 4-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Smirnov et al. (SU 1601250).

11. Regarding Claim 1, Smirnov et al. discloses a drum washing machine comprising:

- a. a water tub (1);
- b. a rotating tub provided in the water tub to be rotated about a transverse axis (3; abstract);
- c. the claimed "elastic supporting means for elastically supporting" is being given means-plus-function interpretation, disclosed by Applicant as being a

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suspension which holds the tub (paragraph 22), which is functionally equivalent to the feet (unlabeled) supporting the tub shown in the figure (the feet are deemed to inherently possess at least some level of elasticity); and

d. an auxiliary baffle (7, the leftmost baffle shown in the drawing) provided on an inner peripheral wall of the rotating tub so as to be close to one of both axial end plates of the rotating tub and spaced away from the other end plates of the rotating tub, the auxiliary baffle extending in a direction of axis of the rotating tub (see abstract).

12. The phrase, "characterized in that the auxiliary baffle...to the elastic supporting means," is a functional limitation and is deemed to be a latent property of the prior art since the prior art is substantially identical in composition and/or structure. MPEP 2145 (II). The baffle of Smirnov et al. is capable of moving laundry near a center of gravity (near a center of gravity could be broadly interpreted to be anywhere in the machine) of a member of vibration system (i.e. the water tub, rotating tub, motor, etc.) because the baffles on the ends of the tub are the largest baffles (abstract) and would push clothes to the center of the tub during tumbling.

13. Regarding Claim 2, the auxiliary baffle is shown to be a convex section, which has an inclined face from one end plate side to the other end plate side. The inclined portion could be considered to extend from the portion directly adjacent the end wall to the peak of the convex section in the direction of the other end plate side, or it could be considered to be the inclined portion extending from the peak of the convex section to the other end plate side.

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14. Regarding Claim 4, Smirnov et al. discloses a first baffle close to one of the end plates of the rotating tub (the baffle to the immediate right of the leftmost baffle shown in the figure) and a second baffle close to the other end plate of the rotating tub (rightmost baffle shown in the figure), and the baffles are opposed to each other in the direction of axis of the rotating drum (the baffles are considered to be opposed in an axial direction, though not *directly* opposed).

15. Regarding Claim 5, the center of gravity of the vibration system member (i.e. the water tub, rotating tub, motor, etc.) would be located nearer to one of the end plates than an axial center of the rotating tub because the washing machine shown in the figure is not exactly symmetrical. The second baffle is larger than the first baffle (see abstract and figure).

16. Regarding Claims 6 and 7, Smirnov et al. discloses a plurality of main baffles provided on an axial center of the inner peripheral wall of the rotating tub (see the center baffles in the figure) so as to extend in a direction of axis of the rotating tub (the baffles possess a width which extends in the direction of the axis), and the main baffles are positioned in different peripheral positions from the auxiliary baffle (see figure).

17. Regarding Claim 8, the auxiliary baffle is shown to be a convex section, which extends to be tapered from one of the end plates of the rotating tub toward the other end plate of the rotating tub. The auxiliary baffle could be considered to be tapered in the direction of one end plate to the other end plate because the baffle gets shorter, and tapers down, from the peak to either of the sides.

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

20. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smirnov et al. (SU 1601250) in view of Jeon et al. (US 6,286,344).

21. Smirnov et al. is relied upon as applied to Claim 1. Smirnov et al. discloses that the rotating tub has a rotational shaft (2) having both ends (the shaft has two ends). Smirnov et al. does not expressly disclose that the shaft is an inclined shaft, where one end is higher than the other.

22. Jeon et al. discloses a washing machine having a "washing tub" (60) slanted with respect to a vertical direction (Figure 2). The tilted washing tub of Jeon et al. makes adding and removing laundry to tub more convenient to a user (column 2, lines 61-67).

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23. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Smirnov et al., as taught by Jeon et al., and to slant the drum such that the opening (left side of tub in the figure) is higher than the other side. The rotational shaft would have one end higher than the other end. The auxiliary baffle of Claim 1 would be close to the end plate which is located higher than the other end plate. One would have been motivated to do so in order to gain the expected benefit of easier access to the tub for the user.

24. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smirnov et al. (SU 1601250) in view of Vona, Jr. et al. (USPN 4,018,067).

25. Smirnov et al. is relied upon as applied to Claim 1. Smirnov et al. discloses that the auxiliary baffle is disposed in a region of the inner peripheral wall and extends from one of the end plates to a center of gravity of the member of vibration system (the baffle extends in all directions). Smirnov et al. does not expressly disclose that the auxiliary baffle extends in a radial direction at least 30mm above the rotating tub, or has an axial dimension not less than one eighth of an axial dimension of the rotating tub.

26. Vona, Jr. et al. discloses that the size and shape of a baffle, "vane" (60), in a washing machine affects the washing action imparted to the laundry; therefore, the size of the baffle is shown by Vona, Jr. et al. to be a results-effective variable, and it would have been obvious to one of ordinary skill in the art at the time of the invention to optimize the size of the baffle to one which would be most effective in cleaning. MPEP 2144.05 (II) and *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977).

Conclusion

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID CORMIER whose telephone number is (571) 270-7386. The examiner can normally be reached on Monday - Thursday 8:30 - 6:00.

28. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

29. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Barr/
Supervisory Patent Examiner, Art
Unit 1792

/DGC/
David Cormier
03/18/2009